



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,880	06/29/2001	James A. Belmont	00054CIP	1018

7590 01/05/2004

Michelle B. Lando, Esq.
CABOT CORPORATION
Law Department
157 Concord Road
Billerica, MA 01821

EXAMINER

MCPHERSON, JOHN A

ART UNIT	PAPER NUMBER
----------	--------------

1756


DATE MAILED: 01/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/896,880

Applicant(s)BELMONT, JAMES A. **Examiner**

John A. McPherson

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2003 and 20 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) 19-55 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9-13 and 18 is/are rejected.
- 7) ☒ Claim(s) 5-8 and 14-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of the species of claims 10-18 (along with generic claims 1-9) is acknowledged. The traversal is on the ground(s) that each of the species comprises the modified pigment product of claim 1 and are therefore not independent inventions. This is not found persuasive because the Examiner has required an election of species, not a restriction, in which claims 1-9 are generic to all the species. Therefore, each of the species comprises the modified pigment product, as pointed out by Applicant. Furthermore, Applicant argues that a search of the modified pigment product would necessarily encompass specific uses of the pigments. However, the search for the modified pigment product itself is in class 106, while the additional searches for the various species, which are not required for the modified pigment product itself, are in many other classes, for example classes 101, 430, 358, etc.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 19-55 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement.

3. While claims 52-55 are currently withdrawn, and have therefore not been examined, the Examiner notes that these claims are "use claims" which would be

rejected under 35 USC 101/112 if examined (see MPEP 2173.05(q)). In the interest of compact prosecution, the Examiner request that Applicant consider rewriting these claims as proper method claims, so that they will be ready for issue if a generic claim is found to be allowable.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,110,994 to Cooke et al. (Cooke). Cooke discloses a modified carbon product having attached a group having the formula $-\text{Ar}-\text{CO}_2-\text{R}$ or $-(\text{C}_n\text{H}_{2n})-\text{CO}_2-\text{R}$, wherein R [corresponding to "Alk" in the present invention] is for example a $\text{C}_{20}-\text{C}_{50}$ alkyl group. See the abstract and column 10, line 57 to column 11, line 27. Therefore, Cooke anticipates the present invention for the modified carbon product where R is a C_{50} alkyl group.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,110,994 to Cooke et al. (Cooke). In addition to the embodiment discussed above in paragraph 4, Cooke discloses a modified carbon product having attached a group having the formula $-Ar-CO_2-R$ or $-(C_nH_{2n})-CO_2-R$, wherein R [corresponding to "Alk" in the present invention] is a polymeric group, for example a polyolefin group. See the abstract; column 10, line 57 to column 11, line 27; and column 23, lines 47-57. However, Cooke does not disclose that the polyolefin group is a polymer of isobutene, butene, or propene, or that the polymer group contains 50 to 200 carbon atoms. It would have been obvious to one skilled in the requisite art to utilize a polymer of isobutene, butene, or propene that contains 50 to 200 carbon atoms as the polyolefin group of Cooke because it is known in art that polymers of isobutene, butene, and propene are each among the group of polymers referred to generically as polyolefins, and it would have been obvious to one skilled in the requisite art to find the optimum or workable ranges for the number of carbon atoms in the polyolefin group, for the art-recognized purpose of increasing the dispersibility of the modified carbon product.

Art Unit: 1756

6. Claims 1-4, 9-13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,110,994 to Cooke et al. (Cooke) in view of WO 99/51690 (WO '690). The disclosure of Cooke is discussed above in paragraphs 4 and 5. However, Cooke does not disclose a dispersion composition comprising the modified carbon product and a non-aqueous solvent. WO '690 teaches that modified pigment products having attached thereto a polymer group, for example a polyolefin group, are preferably capable of being dispersed in a variety of material, including non-aqueous solvents. See the abstract; page 2, line 31 to page 3, line 9; page 3, lines 23-29; and page 5, line 25 to page 7, line 8. It would have been obvious to one skilled in the requisite art to form a disperse in a non-aqueous solvent, as taught by WO '690, utilizing the modified carbon product of Cooke because it is taught that modified pigment products having polyolefin groups attached have improved dispersibility and dispersion stability in a variety of materials, including non-aqueous solvents.

Allowable Subject Matter

7. Claims 5-8 and 14-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. McPherson whose telephone number is (571)

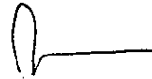
Application/Control Number: 09/896,880
Art Unit: 1756

Page 6

272-1386. The examiner can normally be reached on Monday through Friday, 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on (571) 272-1385. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



John A. McPherson
Primary Examiner
Art Unit 1756

JAM
12/17/03